

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Please cancel claims 5-7, 10-15 and 20-34 as drawn to unelected subject matter.

1. (Currently amended) An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 95.0% identical to a sequence selected from the group consisting of:

- (a) a polynucleotide fragment of SEQ ID NO:1 or a polynucleotide fragment of the cDNA sequence of included in ATCC Deposit No: PTA-4055 ~~XXXXXX~~, which is hybridizable to SEQ ID NO:1;
- (b) a polynucleotide encoding a polypeptide fragment of SEQ ID NO:2 or a polypeptide fragment encoded by the cDNA sequence of included in ATCC Deposit No: PTA-4055 ~~XXXXXX~~, which is hybridizable to SEQ ID NO:1;
- (c) a polynucleotide encoding a polypeptide domain of SEQ ID NO:2 or a polypeptide domain encoded by the cDNA sequence of included in ATCC Deposit No: PTA-4055 ~~XXXXXX~~, which is hybridizable to SEQ ID NO:1;
- (d) a polynucleotide encoding a polypeptide epitope of SEQ ID NO:2 or a polypeptide epitope encoded by the cDNA sequence of included in ATCC Deposit No: PTA-4055 ~~XXXXXX~~, which is hybridizable to SEQ ID NO:1;
- (e) a polynucleotide encoding a polypeptide of SEQ ID NO:2 or the cDNA sequence of included in ATCC Deposit No: PTA-4055 ~~XXXXXX~~, which is hybridizable to SEQ ID NO:1, having potassium channel beta subunit activity;
- (f) a polynucleotide which is a variant of SEQ ID NO:1;
- (g) a polynucleotide which is an allelic variant of SEQ ID NO:1;
- (h) an isolated polynucleotide comprising nucleotides 420 to 1097 of SEQ ID NO:1, wherein said nucleotides encode a polypeptide corresponding to amino acids 2 to 227 of SEQ ID NO:2 minus the start codon;
- (i) an isolated polynucleotide comprising nucleotides 417 to 1097 of SEQ ID NO:1, wherein said nucleotides encode a polypeptide corresponding to amino acids 1 to 227 of SEQ ID NO:2 including the start codon;

- (j) a polynucleotide which ~~is represents~~ the complementary ~~complimentary~~ sequence (antisense) of SEQ ID NO:1; and
- (k) a polynucleotide capable of hybridizing under stringent conditions to any one of the polynucleotides specified in (a)-(j), wherein said polynucleotide does not hybridize under stringent conditions to a nucleic acid molecule having a nucleotide sequence of only A residues or of only T residues.

2. (Original) The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises a nucleotide sequence encoding a human potassium channel beta subunit protein.

3. (Original) A recombinant vector comprising the isolated nucleic acid molecule of claim 1.

4. (Original) A recombinant host cell comprising the vector sequences of claim 3.

5-7. (Canceled)

8. (Currently amended) A recombinant host cell that expresses a ~~the~~ isolated polypeptide encoded by the nucleic acid molecule of claim 1 5.

9. (Original) A method of making an isolated polypeptide comprising:

- (a) culturing the recombinant host cell of claim 8 under conditions such that said polypeptide is expressed; and
- (b) recovering said polypeptide.

10-15. (Canceled)

16. (Currently amended) An isolated nucleic acid molecule consisting of a polynucleotide having a nucleotide sequence selected from the group consisting of:

- (a) a polynucleotide encoding a polypeptide of SEQ ID NO:2;

- (b) an isolated polynucleotide consisting of nucleotides 420 to 1097 of SEQ ID NO:1, wherein said nucleotides encode a polypeptide corresponding to amino acids 2 to 227 of SEQ ID NO:2 minus the start codon;
- (c) an isolated polynucleotide consisting of nucleotides 417 to 1097 of SEQ ID NO:1, wherein said nucleotides encode a polypeptide corresponding to amino acids 2 to 227 of SEQ ID NO:2 including the start codon;
- (d) a polynucleotide encoding the K⁺betaM3 polypeptide encoded by the cDNA clone of ~~contained in~~ ATCC Deposit No. PTA-4055 ~~XXXXXX~~; and
- (e) a polynucleotide which is ~~represents~~ the complementary ~~complimentary~~ sequence (antisense) of SEQ ID NO:41.

17. (Original) The isolated nucleic acid molecule of claim 16, wherein the polynucleotide comprises a nucleotide sequence encoding a human potassium channel beta subunit protein.

18. (Original) A recombinant vector comprising the isolated nucleic acid molecule of claim 16.

19. (Original) A recombinant host cell comprising the recombinant vector of claim 18.

20-34. (Canceled)